

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

TWO NEW SUBSPECIES OF NORTH AMERICAN
BEAVERS.

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In my report on the mammals of Texas* in 1905 I referred the beavers of the Rio Grande and Pecos rivers to *Castor canadensis frondator* Mearns. Since that time specimens have been collected at additional localities along the Rio Grande and its tributaries, and in working over the material in the Biological Survey collection from New Mexico I find that the beavers of the Rio Grande drainage differ so markedly and constantly from those of the Colorado drainage that it becomes necessary to provide a name for them. Other specimens from the Upper Peninsula of Michigan brought into the comparison of material also prove to be so different from typical *canadensis* that a subspecific name is required for them. These two forms show what appear to be the opposite extremes of pale desert coloration in those from the Rio Grande region and dark, rich coloration of those from the densely shaded forest area of northern Michigan. The cranial characters are also well marked.

Castor canadensis mexicanus subsp. nov.

RIO GRANDE BEAVER.

Type from Ruidoso Creek, six miles below Ruidoso, New Mexico, ♀ adult, No. 96,522, U. S. Nat. Mus., Biol. Survey Coll., collected by C. Barber, Sept. 29, 1899. Collector's number, 83 (Biol. Surv. X catalogue No. 1991).

General characters.—Size medium, colors dull and pale with very little chestnut at any season. Skull relatively short, wide and high.

* North American Fauna No. 25, Biological Survey of Texas, p. 124, 1905.

Color of type and 4 topotypes (Sept. 28 to Nov. 4): upper parts dull russet, brightest on crown, palest on cheeks and rump; ears dark brown like underfur of back; lower parts clear drab or dull buffy gray, overhair and underfur the same shade; sides and feet darker drab. Usually a trace of bright chestnut about the anus, and in the type and one topotype some chestnut on the hind feet. A topotype young of the year (Sept. 28) is slightly duller and darker than the adults. Two very small young (April 3 and 5) from the Rio Grande at Brownsville are practically the same color throughout as the adults, as is also a good specimen from Four Mile Run, Va., supposed to be one of the Brownsville beaver that escaped from the Washington Zoological Park. A half-grown specimen from Costilla River (an eastern affluent of the Rio Grande in northern New Mexico) taken August 23, is slightly darker and richer colored than the type and is evidently grading toward *canadensis* or *frondator*.

Cranial characters.—Compared with skulls of typical *canadensis* from York Factory and Oxford House, Manitoba, the skulls of this form are relatively short, wide and high, with more spreading zygomatic arches, shorter, wider nasals and rostrum, and higher, narrower occiput. Most of these characters are tending toward those of *frondator* and *texensis*, from both of which they differ however in details sufficient for ready recognition. From *frondator* the skull differs in heavier, deeper jugal, lower occiput and wider ex-occipital condyles. From *texensis* the skull differs in short, oval nasals, in narrower interorbital constriction and numerous other details.

Measurements.—Type, ♀ ad., total length, 1070; tail vertebrae, 400; hind foot, 174. Weight, 47 lbs. Ad. ♂ topotype (No. 96,525), 1020, 300, 180. *Skull* of type, condylobasal length, 136; zygomatic breadth, 101; length of nasals, 49; width of nasals, 25; mastoid breadth, 66; height of occiput, 40.3; alveolar length of upper molar series, 30.3.

***Castor canadensis michiganensis* subsp. nov.**

WOODS BEAVER.

Type from Tahquamenaw River (five miles above falls), Luce Co., Michigan, ♀ adult, No. 170,561, U. S. Nat. Mus., Biol. Survey Coll., collected Sept. 20 by Clarence Birdseye. Collector's number, 1270.

General characters.—Size medium or small, colors very dark, ears and feet black; skull short and quadrate.

Color of type in early winter pelage: upperparts dark umber brown, brighter, almost mahogany brown on head and cheeks; ears and feet and nose black; lowerparts rather darker than upperparts, with blackish on breast and flanks. Quarter-grown young of same date and place duller and darker than type.

Skull relatively short and wide with abruptly spreading zygomatic arches; rostrum short and less tapering than in *canadensis*; nasals more quadrate, abruptly constricted posteriorly; occiput high and narrow

with upright occipital crest, giving a "sawed off" appearance to base of skull.

Measurements.—Type, ♀ ad., total length, 1170; tail vertebrae, 470; hind foot, 185 millimeters. *Skull* of type, condylobasal length, 129; zygomatic width, 96.4; length of nasals, 46; width of nasals, 24; mastoid breadth, 65; height of occiput, 39 (would be 41 but for unusual notch in basio-occipital); alveolar length of upper molar series, 29.4.

Weight of type, 58 lbs.